

**USAID Development Innovation Accelerator
Broad Agency Announcement for
Fighting Ebola: A Grand Challenge for Development**

I. Overview

A. This Broad Agency Announcement (BAA) seeks opportunities to co-create, co-design, co-invest, and collaborate in the development, testing, and scaling of practical and cost-effective innovations that can help healthcare workers on the front lines provide better care and stop the spread of Ebola. The United States Agency for International Development (USAID) invites organizations and companies to participate with USAID, in cooperation with its partners, in response to Fighting Ebola Challenge Addenda issued under this BAA, as described below, to provide innovations and technologies that further the U.S. Government's commitment to addressing the Ebola epidemic.

B. Federal Agency Name:

The United States Agency for International Development (USAID), and administered through the Global Health Bureau and the U.S. Global Development Lab (Lab).

C. Opportunity Title:

The USAID Fighting Ebola BAA

D. Announcement Type:

This BAA serves to inform the public of the opportunity for funding from USAID to enhance the global Ebola response. Actual opportunities for funding and partnering to address Ebola will be issued as Challenge Addenda to this BAA. The terms of this BAA apply to each Challenge Addendum. Individual Challenge Addenda may have specific requirements for evaluation criteria and administrative information, such as the requirements for expressions of interest, concept papers, and response deadlines.

E. Opportunity Number:

BAA-EBOLA-2014

F. Authority:

This BAA is issued under Federal Acquisition Regulations (FAR) Part 35.016(c). This is not a FAR Part 15 procurement.

G. Catalog of Federal Domestic Assistance (CFDA) Number:

98.001, USAID Foreign Assistance for Programs Overseas.

H. Response Date: The response date, as well as instructions to responders, is established

by individual Addenda to this BAA.

II. Overall Purpose and Specific Rights Reserved for the Government under this BAA

A. This BAA is a competitive approach to consider proposals that harness scientific research and innovation to enhance the global Ebola response, allowing USAID to:

1. Reach out to potential partners with recognized expertise in relevant areas, and
2. Co-create, co-design, co-invest, and collaborate with partners.

B. Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the concepts received and the availability of funds. Some award types may not include any funding.

C. This BAA reserves specific rights for the Government, in addition to rights described elsewhere in this document or by law or regulation, including:

1. The right to select for negotiation and award all, some, one, or none of the proposals received in response to this solicitation.
2. The right to make awards without discussions, or to conduct discussions and/or negotiations, whichever is determined to be in the Government's interest.
3. The right to accept proposals in their entirety or to select only portions of proposals for award or co-investment.
4. The right to select for award an instrument type that is appropriate to the specific development context, partner relationship, and concept selected for award. Instruments types include but are not limited to contracts, grants, cooperative agreements, Global Development Alliance agreements, Development Innovation Agreements, Inter Agency Agreements, Government to Government Agreements, Donor to Donor Agreements, and Memorandums of Understanding. In addition, the Government may craft a new instrument type to meet the needs of a specific relationship.
5. The right to co-create projects with one or more submitter under this BAA, when it is in the best interest of the Government.
6. The right to request any additional, necessary documentation upon initial review. Such additional information may include, but is not limited to, a further detailed proposal, budget, and representations and certifications.
7. The right to fund or co-invest in proposals in phases, with options for continued work at the end of one or more of the phases.
8. The right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, the proposer fails to timely provide requested additional

information, or the Government believes it is in its best interest.

III. Opportunity Information

A. Problem and Challenge Statements

Amidst the escalating Ebola epidemic and global response, USAID and its partners see a clear and urgent need for innovative ideas around improving the delivery of care and stemming the spread of disease.

PROBLEM

On the front lines of the Ebola epidemic, health care workers face many obstacles in providing the timely care to patients that is required to prevent the virus from spreading—from heat stress caused by the personal protective equipment (PPE) they wear, to lengthy infection control measures that leave no room for error, to communities reluctant to seek care.

CHALLENGE

Develop new practical and cost-effective solutions to improve infection treatment and control that can be rapidly deployed (1) to help health care workers provide better care and (2) transform our ability to combat Ebola.

B. Ebola Challenges Addenda

USAID will issue Addenda to this BAA that will present specific Ebola Challenges. The Ebola Challenge Addenda will focus on identified problems, solutions, scalability opportunities, feasibility studies, and other research and development initiatives addressing the problem and challenge statements described above. As stated above, potential partners will respond to individual Ebola Challenge Addenda, not to this BAA.

C. Collaboration. The intent of this BAA is to allow co-creation and co-design to the maximum extent to create high quality, effective partnerships with great efficiency in time and resources. The types of collaboration include:

1. Co-creation. Co-creation occurs after an expression of interest is submitted, but before the concept paper is developed. The potential partner(s) and the Government, represented by the Activity Manager, work together to write and/or revise the concept paper, and jointly present the concept paper to the Ebola Scientific Review Board.

2. Co-design. Co-design occurs after the Ebola Scientific Review Board recommends the project for further development, and the Contracting Officer or Agreement Officer has determined the submitter to be an Apparently Successful Partner. At this point, the Contracting Officer or Agreement Officer may determine the general nature of the award type or the specific award type, depending on the nature of the project, to facilitate project design. During co-design, the Apparently Successful Partner and the Activity Manager will design the technical approach, general resource requirements, and

management control of the project under the guidance of the Contracting Officer/Agreement Officer.

3. Co-invest. Co-invest refers to the Government's strategic aim that the partnerships resulting from the individual BAA awards represent opportunities to achieve mutual or complimentary development goals of the Partner and USAID, and therefore embrace shared responsibility, shared risk, and shared resourcing. Shared resourcing may be accomplished through funding by both parties, either through cash resources or the exchange of other resources, both tangible and intangible, such as in-kind contributions, expertise, intellectual property, brand value, high-value coordination, and access to key people, places, and information. Co-investing does not require equally shared resourcing (such as 1:1 leverage), but rather resource contributions that are appropriate to the specific project's objectives, considering the comparative advantages brought by the participation of each party and the award type.

IV. General Criteria for Consideration

- A. Each individual BAA Addendum will specify the criteria for selection. This section provides general information on USAID's priorities for project consideration. Submissions are not evaluated against other submissions, but solely against the evaluation criteria from this BAA and applicable BAA Addendum.
- B. Decisions regarding USAID's pursuit of a particular project, technology, or relationship are based on the available evidence, data, and resulting analysis. The Global Health Bureau and the Lab seek solutions that can have a significant impact on the Ebola epidemic in the immediate future.
- C. Depending on the stage of development, USAID will consider different levels of risk, evidence, and data on the potential for impact and scale.
- D. At the initial stage of sourcing, prototype or proof of concept, the design of the innovation should be a new or dramatically-improved approach with the potential for significant impact at a lower cost and without any reduction in efficacy as compared to the current standard.
- E. At the piloting stage, the product or service must be viable and demonstrate significant impact, behavioral change, and customer demand.
- F. At the transitioning to scale stage, data and evidence must indicate that significant impact can be achieved at a lower price point, a business or other implementation model is being tested and sustainability demonstrated, any legal or regulatory challenges are understood as part of a market strategy, and the quality of the impact, product, or service will not be significantly affected by expansion or widespread adoption.
- G. Innovations that demonstrate such evidence will be reviewed for endorsement to scale across multiple countries.
- H. The reputations of organizations, their past performance, the managerial and technical ability of the person or team of people engaged in the endeavor are always significant

considerations in assessing the potential and the risks associated with each award.

V. Award Process.

The award process under this BAA generally has the following steps:

1. Expression of Interest. Potential partners will submit an expression of interest in response to an Ebola Challenge Addendum. Expressions of Interest are generally short (2-7 pages) and contain information as outlined in the Ebola Challenge Addendum, such as the specific focus area, the expected impact, any partner and resource relationships, and proposed funding from USAID and/or other partners. USAID will perform an initial review of the research and development idea presented in the expression of interest. Note that the Government may reach out to potential partners and request an expression of interest.
2. Development of the Concept Paper. For Expressions of Interest that are deemed to have merit by USAID, USAID will issue an invitation to collaborate to the potential partner. Working together, USAID and the potential partner will collaborate on a Concept Paper. It is during this phase of co-creation and co-design that the parties will begin to determine additional partners and resources to complement the project. The Concept Paper, generally 5-10 pages, will further detail and explain the project as initially provided in the Expression of Interest.
3. Review by the Ebola Scientific Review Board. All Concept Papers will be reviewed by the Ebola Scientific Review Board, which is comprised of scientists, and Ebola and development experts from USAID, partners, and outside parties. The Ebola Scientific Review Board will review Concept Papers and recommend which applicants should be considered Apparently Successful Partners. Using its technical expertise, the Ebola Scientific Review Board will suggest revisions/additions to the project, and potential partners and resources.
4. Contracting/Agreement Officer Determination. The Contracting/Agreement officer will review the Ebola Scientific Review Board's recommendations and consider other information, such as resource availability, preliminary partner responsibility assessment, and Agency priorities, and will make a determination that the respondent is an Apparently Successful Partner. The Contracting/Agreement Officer may also identify or narrow down the anticipated instrument type to facilitate project design.
5. Request for Additional Information. USAID will work with partners identified by the Ebola Scientific Review Board, and co-design the project and assist the partner to provide additional information with respect to the proposer's technical approach, capacity, management and organization, past performance, and budget, as well as representations and certifications, as needed.
6. Additional Partners/Resources. During the project co-creation and co-design, both the Apparently Successful Partner and USAID will identify additional partners and resources, and whether additional mechanisms are necessary to implement the project.
7. Final Review and Negotiation. The USAID Contract/ Agreement Officer will engage in final review, negotiation, and determinations of instrument type, responsibility, cost reasonableness, etc., and will craft an award instrument with the Apparently Successful Partner. If the Apparently Successful Applicant and USAID cannot arrive at a mutually

agreeable arrangement, the Contract/ Agreement Officer will cancel the project at no cost to the Government.

8. Award. The USAID Contract/ Agreement Officer will award the instrument.

VI. Award Information

A. Awards under this BAA will be based on responses to individual Addenda to this BAA, which provide the specific Ebola Challenge.

B. No responses will be considered under this BAA until an Addendum has been issued; only submissions that are responsive to a specific Ebola Challenge Addendum will be considered. Any proposal, concept paper, or expression of interest received that is not in response to an Ebola Challenge Addendum will not be considered. However, USAID encourages and will consider suggestions for Ebola Challenge Addenda.

C. Awards under this BAA will be made to Apparently Successful Partners on the basis of their ability to further the U.S. Government's goal of stemming the Ebola epidemic. USAID is seeking new applications of science, technologies, innovations, and partnerships that provide the best value to the Government and have the potential to substantially contribute to this goal.

D. Proposals identified for negotiation may result in a contract, grant, cooperative agreement, Global Development Alliance agreement, Development Innovation Agreement, Inter Agency Agreement, Government to Government Agreement, Donor to Donor Agreement, Memorandum of Understanding or alternative agreement type, depending upon the nature of the work proposed, the required degree of Government involvement, and other factors. The Government Contracting/Agreement Officer will determine award instrument type and negotiate instrument terms and conditions with selectees. USAID may select the award instruments it deems appropriate.

E. Eligibility Information. Public, private, for-profit, and non-profit organizations, as well as institutions of higher education, public international organizations, non-governmental organizations, U.S. and non-U.S. government organizations, and international donor organizations are eligible under this BAA, unless otherwise stated in the individual BAA Addendum. All organizations must be determined to be responsive to this BAA and sufficiently responsible to perform or participate in the final award type.

F. Cost Sharing or Leveraging. Whether cost share and/or leverage are required will be determined by the individual BAA Addendum, final award type, and/or the mutual agreement of the parties. Nothing in this BAA precludes reasonable cost sharing, leveraging, or other exchange of resource arrangements, and proposers are encouraged to suggest creative approaches to resourcing projects.

VII. Standard Clauses and Provisions of Award. The standard clauses or provisions for awards are generally prescribed by law and regulation, and will vary considerably by award type. Information regarding clauses and provisions will be offered to the proposer when the award type is identified.

VIII. Obtaining the BAA and Addenda. This BAA and any future Addenda can be downloaded from <http://www.grants.gov> and <http://www.fbo.gov>. Issuance of this BAA does not constitute an award commitment on the part of USAID, nor does it commit USAID or any of its funding Partners to pay for costs incurred in the preparation and submission of proposals. Further, USAID reserves the right to reject any or all proposals received.

**Personal Protective Equipment and Infection Treatment and Control
Addendum 01**

to

**The USAID Development Innovation Accelerator
Broad Agency Announcement (BAA) for
Fighting Ebola: A Grand Challenge for Development**

I. Background

The spread of Ebola in West Africa continues at a rate that is outpacing efforts to isolate and care for those infected. In response to this unprecedented outbreak, the United States is rapidly expanding its efforts to address this global health crisis. In light of the persistence of the outbreak and the demands it has placed on global infection containment resources and processes, the federal disaster response community has recognized an opportunity to use open innovation to make significant strides in advancing our ability to combat Ebola.

Every day, in extreme heat and humidity, health care workers in Ebola-affected countries are performing life-saving tasks to prevent the spread of the virus. On the front lines of the Ebola epidemic, health care workers face many obstacles in providing the timely care to patients that is required to prevent the virus from spreading—from heat stress caused by the personal protective equipment (PPE) they wear, to lengthy infection control measures that leave no room for error, to communities reluctant to seek care.

USAID in partnership with the White House Office of Science and Technology Policy, Centers for Disease Control, and the Department of Defense seek to harness the power of crowdsourcing, competition, and breakthrough innovation to address specific barriers faced by efforts to combat the current Ebola epidemic and better prepare us for future outbreaks. In this addendum USAID and its partners are looking for immediate, short-term and longer-term solutions addressing the problem and challenge statements identified in Section III.A of the BAA that can help healthcare workers on the front lines provide better care and stop the spread of Ebola now and in the future.

II. Solutions Sought

For the purposes of this Addendum USAID and partners specifically seek solutions that address the two focus areas below.

1) **STRENGTHEN HEALTHCARE CAPACITIES:** Approaches to enhance the protective equipment, care setting and tools used in the field to empower and protect healthcare workers

- *Personal Protective Equipment (PPE):* Developing, testing, and scaling entirely novel PPE or modifications to current PPE that address issues of heat stress and comfort for healthcare workers
- *Care Setting:* Accelerating the development and scale-up of approaches to enhance the physical and procedural care environment relating to heat stress, comfort and the safety of healthcare workers and patients
- *Health Care Worker Tools:* Accelerating the development and scale of tools that improve the delivery of care to patients (e.g. rapid, point of care diagnostics or more efficient ways of moving samples and communicating results back to health care workers quickly)

2) **CARE-SEEKING:** Approaches that ensure communities receive and respond to timely, accurate, and actionable information about Ebola prevention and treatment

- Developing and scaling behavior change approaches to encourage—and dispel myths and misconceptions that discourage—care-seeking or interacting with health care authorities
- Improved information management and communication to the community on availability of beds in community care centers or emergency treatment facilities

USAID and its partners seek both innovators with novel solutions and resource partners with the ability to test and scale up innovations. We are particularly interested in resource partners with, but not limited to, the following capabilities:

- Ability to rapidly prototype and produce manufacture-ready products
- Ability to deploy solutions in contexts worldwide, particularly West Africa
- Ability to produce or improve any existing technologies currently in use
- Capacity and willingness to partner to test identified solutions

WHAT WE ARE LOOKING FOR

Generally we are looking for expressions of interest that clearly demonstrate the following attributes:

- Innovation, including creativity of the given approach and clear differentiation from existing approaches.
- Low-cost and ability to be scaled rapidly
- Strong likelihood of achieving a substantial impact.

- Solutions that can be deployed and have an impact in the near-term (2-3 months of initial investment) or longer-term (within a year of initial investment), and improve the response to the current Ebola epidemic as well as future outbreaks.

Specifically with respect to personal protective equipment we are looking for expressions of interest that may include but are not limited to:

- Solutions (new or modified PPE kit or other innovative solutions) that allow much longer work periods, use less PPE, require fewer removals, generate less infectious waste and offer enhanced protection.
- New innovative barrier materials (e.g., antimicrobial treatments, nano-fibers, novel polymers and coatings, new finishing technologies, application of plasma processing and special reinforcements, using new nonwoven fiber bonding technologies, breathable membranes, etc.) that allow the same level of protection provided by the PPE today, but with higher levels of air and water vapor permeability, and breathability.
- PPE that is fully reusable.
- Low cost, next generation sensor technologies to seamlessly assess heat stress noninvasively when wearing PPE, including possible integration into the PPE to provide real-time monitoring and decision making on PPE use.
- Modified PPE for use in non-health care settings (e.g. airport or security checkpoint screening, burials, etc.)
- Portable personal cooling technologies that can be integrated into or compatible with existing PPE ensembles that are suitable for resource limited environments
- Inexpensive, easily cleanable, and integrated powered air purifying respirators equipped with a hood or faceshield that can provide multi-functional protection (facial barrier protection and respiratory protection), while simultaneously cooling the facial region.

WHAT WE ARE NOT LOOKING FOR

- Research that does not provide a clear path to development and testing of prevention and intervention strategies
- Solutions that are less efficacious than current technologies or approaches
- Proven approaches that are already in use in the field
- Basic research or laboratory-intensive research. Basic research is defined as research directed towards fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind

Awards are planned to be in the range of \$100,000 to \$1M.

III. Expressions of Interest

A. Please submit an expression of interest that identifies your group's willingness to collaborate with the USAID Global Health Bureau, Ebola Response Team, and Global Development Lab, describes your idea/approach, highlights your group's value to the partnership, and discusses the potential of your idea to be rapidly deployed and have a substantial impact on the Ebola response.

B. Submitted expressions of interest will:

- Be in English
- Be submitted electronically using the link to the application platform found at ebolagrandchallenge.net
- Be up to 3 pages in length, no smaller than 12 point font;
- Contain a header with the following information (included in the page count):
 - Respondent Name/Group and Contact Information;
 - Response Title;
 - BAA Addendum Name/Number;
- Contain one optional graphic that fits on an 8.5"x11" or A4 piece of paper (included in the page limit);
- Be in .pdf, .docx, or .odf format

C. Information Protection

USAID's goal is to facilitate the activities that are required to lead to the development and scaling of innovative, and potentially commercially viable, solutions to address the Ebola crisis. Understanding the sensitive nature of submitters' information, USAID will work with organizations to protect intellectual property.

Expressions of interest should be free of any intellectual property that the submitter wishes to protect, as the expressions of interest will be shared with USAID partners as part of the selection process. However, once submitters have been invited to engage in further discussions, submitters will work with USAID to identify proprietary information that requires protection.

Therefore, organizations making submissions under the BAA Addendum hereby grant USAID a royalty-free, nonexclusive, and irrevocable right to use, disclose, reproduce, and prepare derivative works, and to have or permit others to do so to

any information contained in the expressions of interest submitted under the BAA Addendum. As noted above, if USAID engages further with the organization regarding its submission, the parties can negotiate intellectual property protection for the organization's intellectual property.

Organizations must ensure that any submissions under the Addendum are free of any third party proprietary data rights that would impact the license granted to USAID herein.

IV. Review of Submissions

A. Criteria

The following criteria will be applied to all expressions of interest:

1. ***Idea/Approach***: Novelty, creativity and soundness of the idea/approach and its relevance to the Solutions Sought (Section II).
2. ***Partnership Expectations and Value***: Strengths of your organization or consortium as a partner, including your ability to make a unique contribution to the Solutions Sought.
3. ***Impact***: The likelihood of generating substantial impact for the current Ebola crisis response and/or future responses.

B. Selection Process

USAID and partners will review and select expressions of interest submitted in accordance with the guidelines and criteria set forth in this Addendum. USAID and partners reserve the right to disregard any expressions of interest that do not meet the guidelines. USAID is not obligated to issue a financial instrument or award as a result of this Addendum.

Stage 1: Selected organizations or consortia will be invited, individually or in combination, to discuss their proposals with USAID and its partners, which may result in one or more applicants being invited to submit concept notes.

Stage 2: Concept notes will be submitted to USAID and reviewed for selection. Approved proposals will proceed to an award process.

C. Timing

Submissions received by November 7, 2014 will be part of the first round of review. Submissions received by December 1, 2014 will be part of the second round of review. Expressions of interest received after December 1, 2014 will be reviewed in subsequent rounds of review. USAID reserves the right to review submissions at any time.

USAID intends to select apparently successful applicants as quickly as possible.